NASA Procedural Requirements

NPR 2800.1
Effective Date: September 17, 1998
Expiration Date: November 30, 2006

COMPLIANCE IS MANDATORY

Printable Format (PDF)

Subject: Managing Information Technology w/Change 1, 9/17/04

Responsible Office: Office of the Chief Information Officer

Chapter 1. Chief Information Officer Organization

The NASA Chief Information Officer (CIO) maintains an organizational framework that is integrated with the way the Agency implements its programs and projects. The CIO works with CIO Representatives from the Strategic Enterprises and Centers to support the Agency in the accomplishment of its missions and programs through the efficient and cost-effective utilization of IT. The NASA CIO Operating Model, Figure 1-1, shows the participants and their relationships. The roles and responsibilities of the CIO, CIO Council, CIO Representatives, CIO Representatives Board, IT Principal Centers, Expert Centers, and Center of Excellence for IT are all described in this chapter.

1.1. NASA CIO

The NASA CIO is the principal advisor to the Administrator and other senior officials on matters pertaining to IT and is responsible for establishing IT policies and promoting standards and a secure architecture to support scientific, engineering, and administrative data requirements. The NASA CIO serves on the Agency Program Management Council to assure that the IT investments which enable mission-focused programs and projects are given appropriate visibility and review. The NASA CIO is the primary advocate for the IT investment strategy and will establish metrics to manage the Agency`s IT investments. The NASA CIO reports for the Agency to the Office of Management and Budget (OMB) and Congress on the impact of IT investments on programmatic outcomes. The NASA CIO will recommend outsourcing and privatization of IT where appropriate, promote technology advancements and infusion, and assure IT training for Agency personnel. The NASA CIO is responsible for implementing NPR 7120.5 in IT program/project life-cycle management practices and working with the Chief Financial Officer (CFO) to provide financial information systems.

1.2. CIO Council

The CIO Council provides a broad senior management focus for key policy, standards, and funding decisions for the Agency`s IT. It is chaired by the NASA CIO and consists of the NASA Deputy CIO, CFO or Deputy, Enterprise Associate Administrators or Deputies, Assistant Administrator for Institutional and Corporate Management, Chief Engineer or Deputy, Chief Technologist or Deputy, and Manager, Space Operations Management Office (SOMO). The CIO Council establishes Agency-level IT policies and serves as a forum for addressing Agency-level initiatives and issues. The CIO Council sets the IT investment strategy for the Agency, assuring a balance of programmatic and institutional IT support; approves NASA`s IT strategic and 5-year plans and proposed IT priorities which have resource impacts; approves disposition of IT budget and program issues; makes a final determination regarding adoption of NASA IT standards; and serves as the IT capital investment advisory group to the NASA Capital Investment Council (CIC).
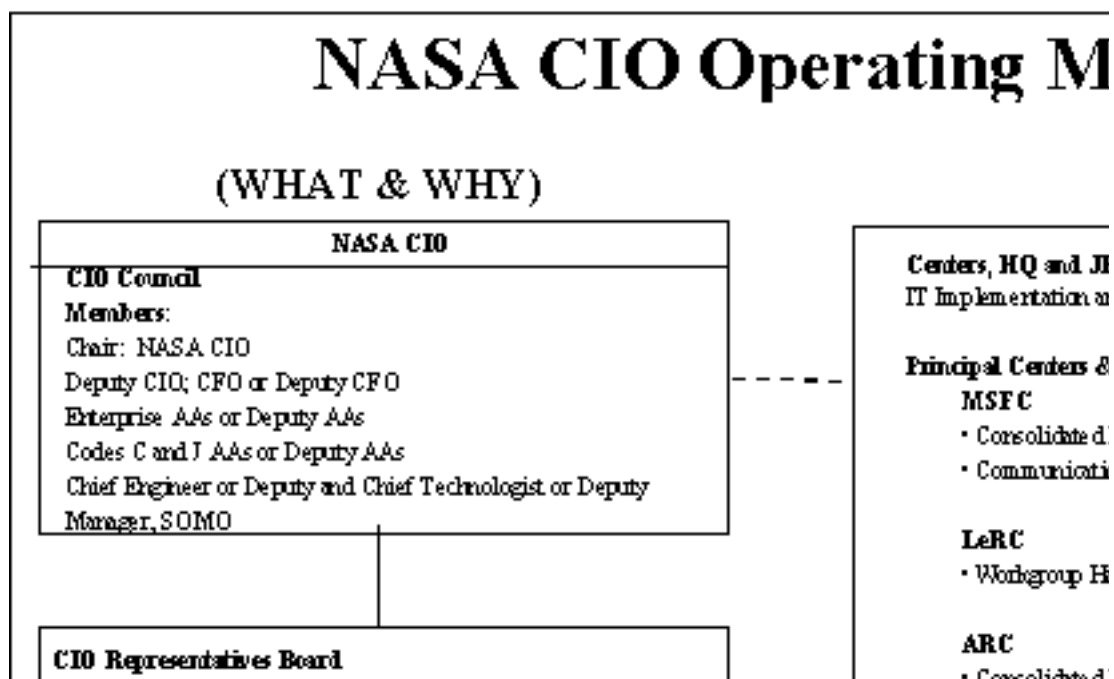
Figure 1-1

1.3. CIO Representatives

Each Enterprise Associate Administrator, Center Director, and the Assistant Administrator for Institutional and Corporate Management will appoint a senior official to represent his/her respective organization and collaborate with the NASA CIO in establishing IT policies and standards.

1.3.1. Enterprise CIO Representatives

In support of the NASA CIO, the Enterprise CIO Representatives will work with Center CIO Representatives to analyze Enterprise mission processes and recommend IT solutions to support or improve processes and mission outcomes, promote a secure IT environment, and serve as the advocate for the Enterprise IT requirements and budget. The Enterprise CIO Representative will (1) have management-level knowledge of Centers` IT activities in order to influence improvement of management processes; (2) be members of the CIO Representatives Board and work with the NASA CIO, the CIO Council, and the Center CIO Representatives to develop strategies, policies, standards, and guidelines that will improve Agency/Enterprise mission outcomes; (3) assure that the Principal/Expert Center and Center of Excellence activities are integrated; (4) identify and recommend IT areas to be privatized/outsourced; and (5) promote appropriate IT training for Enterprise personnel.

The Enterprise CIO Representative is responsible for assuring that the subordinate Principal Centers have the necessary capability and resources to perform approved assignments and for providing insight to Principal Center activities.

1.3.2. Center CIO Representatives

The Center CIO Representatives (Note: All references to Center CIO Representatives include the Headquarters CIO Representative) will (1) implement an effective IT investment plan consistent with established Agency, Enterprise, and Center policies, goals, and standards; (2) concur on all Center major IT investments to assure regulatory, policy, and compliance with standards; (3) advise and counsel Center senior managers (including program managers) on IT investments; (4) define and report metrics; (5) ensure that implementation procedures and Center standards are established in compliance with Agency and Enterprise policies and standards; (6) report to an individual who has management and budgetary authority to implement Center IT investment decisions; (7) coordinate the Center IT budgets, requirements, and investments with the Enterprise CIO Representatives (at Headquarters, the Assistant Administrator for Institutional and Corporate Management); and (8) have the authority to represent and commit the Center at Agency management meetings. The responsibility for assuring a secure IT environment, resolving areas of duplication, and encouraging IT training for Center personnel, is inherent in the Center CIO Representative responsibilities.

1.3.3. CIO Representatives Board

The CIO Representatives Board supports the CIO Council in establishing IT policies and plans and approves standards. Chaired by the NASA CIO, the Board is composed of CIO Representatives from the Strategic Enterprises and Centers along with representatives from the Office of the CFO and, as an observer, the Jet Propulsion Laboratory. The CIO Representatives Board is responsible for drafting the Agency IT investment plans, identifying unnecessary redundancies, and recommending strategies that optimize capabilities. The Board makes recommendations to the CIO Council on IT investments or initiatives that impact infrastructure or multiple Enterprises. The CIO Representatives Board will develop IT performance metrics and periodically evaluate progress in achieving Agency objectives and report its findings to the CIO Council. The Board works closely with the Principal Center Integration Team (PCIT) (as described in paragraph 1.4.2 below) to facilitate coordination of Agency IT Principal Center initiatives.

1.4. Principal Centers

The NASA CIO will designate Principal Centers to coordinate Agencywide initiatives in specific IT architecture areas. The Principal Centers will define the IT architecture associated with their areas of responsibility, maintain configuration control, and identify and recommend standards. The Principal Centers will be the NASA organizations responsible for development, investigation, testing, selection process, integration, implementation planning, and/or procurement planning of hardware and software to support the NASA communication architecture, workgroup hardware and software, IT security, consolidated mainframe and administrative systems, and consolidated management of supercomputers. The Principal Centers will actively solicit the technical expertise of other NASA Centers to assure that the full technical expertise of the Agency is effectively utilized and that Center-specific requirements are properly addressed. Principal Centers are fully responsible for managing assigned activities for the Agency, to include those supporting activities performed at Expert Centers (those Centers designated lead in specific Principal Center support areas). The extent to which Principal Centers rely on the technical expertise at other Centers is discretionary. As such, the Principal Centers must be cognizant of IT requirements for all NASA Centers.

1.4.1. Principal Centers for Standards/Architecture

Principal Centers have been designated for leading Agencywide activities in the following areas:

Information Technology Security Ames Research Center

Classified Communications Security

(COMSEC) Kennedy Space Center

Workgroup Hardware & Software Lewis Research Center

Communications Architecture Marshall Space Flight Center

1.4.2. Principal Center Integration Team

The Principal Centers will interface with the NASA CIO and CIO Representatives Board through the PCIT which includes the Project Managers from the Communications Architecture, IT Security, Workgroup Hardware and Software Principal Centers, and a representative of the NASA CIO. The PCIT will recommend an integrated set of priorities and processes to the CIO Representatives Board for approval and resource commitment. Additional resource requests for baseline modifications or new starts will be presented to the CIO Council for decision after the Principal Centers` recommendations and implementation strategies are provided to the CIO Representatives Board.

1.4.3. Principal Centers for Consolidated Management and Operations

Principal Centers have been designated for Agencywide Management and Operations of the following areas:

Supercomputing Ames Research Center

Mainframe and Administrative Systems Marshall Space Flight Center

Desktop Outsourcing Goddard Space Flight Center

1.5. Center of Excellence for Information Technology

The Center of Excellence (COE) for IT, Ames Research Center (ARC), provides the Agency with a single IT research focus. The Agency utilizes the COE to leverage the products of IT research and development The NASA CIO has a role in bridging the gap between the COE and the operational IT requirements of the Agency. To this end, the NASA CIO will work closely with the Office of Aeronautics and Space Transportation Technology and ARC to assure appropriate coordination between this research effort and the Agency`s operational needs.

| TOC | Change | PREFACE | Chapter1 | Chapter2 | ALL |

| NODIS Library | Legal Policies(2000s) | Search |

DISTRIBUTION:
NODIS

This Document Is Uncontrolled When Printed.
Check the NASA Online Directives Information System (NODIS) Library
to Verify that this is the correct version before use: http://nodis3.gsfc.nasa.gov

---